Frogs of the Gibb River Road, Kimberley Division, Western Australia

Michael J. Tyler,* Margaret Davies* and Graeme F. Watson†

Abstract

Sampling the frog fauna along a 390 km transect between Derby and Gibb River Station resulted in the collection of 28 species; representing 74% of the frog fauna of the Kimberley Division. Three assemblages could be recognised: a ubiquitous group common to all sampling sites, one restricted to the area around Derby, and a further group confined to rocky creeks in the Phillips Range area. Comparison of the fauna of each site along the transect suggests that a major change occurs between Lennard River and the King Leopold Ranges.

Notes are provided on species representing significant range extensions. Morphometric and osteological data for *Uperoleia mjobergi* and *U. crassa*, and a summary of call variation in these two species and *U. lithomoda* are provided. *U. variegata* is referred to the synonymy of *U. lithomoda*.

Introduction

Since 1977 zoologists from the Universities of Adelaide and Melbourne have made eight visits to the Kimberley Division of Western Australia to study and collect frogs. The visits have occurred in the wet season, supplemented by two dry season visits by one of us (M.J.T.) to Derby and the Mitchell Plateau respectively. In consequence of these visits the known frog fauna of the Kimberley has been increased to its present figure of 38 species (Tyler, Smith and Johnstone 1984).

Previously, our collecting activity has occurred on the periphery of the Kimberley, but in January-February 1985 we travelled 390 km from Derby, in the south-western Kimberley, to Gibb River Station near the centre of the Division. A major purpose of the exercise was to examine the frog fauna, seeking the northern limits of distribution of the fauna of the Derby area which contains elements not known from other localities. (Tyler, Davies and Martin 1981a). We also were able to supplement biological knowledge of some of the species and, from a study of the collections made, add to knowledge of morphological and call variation.

Materials and methods

Details of transect

The transect extended along the entire length of the Gibb River Road. The road starts at the southern outskirts of the coastal town of Derby, 16 km SW of

† Department of Zoology, University of Melbourne, Parkville, Vic. 3052.

^{*} Department of Zoology, University of Adelaide, Box 498, G.P.O., Adelaide, SA 5001.